

Comparison of Health Appraisals by Nurses and Physicians

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A three-month special training program enabled nurses in a multiphasic screening unit to perform relatively accurate physical examinations.

Traditionally, physical examinations in health appraisal have been performed only by physicians. With the increasing numbers of physical examinations as prerequisites for employment or insurance and yearly physical examinations of relatively well persons, physicians are finding it difficult to meet the demand for physical examinations and also maintain quality care of their patients. To cope with this increased demand, efforts have been made to use registered nurses in health appraisals of adults and children throughout the United States.¹⁻³

Although physicians have traditionally delegated many patient care responsibilities to nurses and more recently to medical assistants, they have expressed reluctance to permit physical examination by the medical assistant. Nurses' participation in health appraisal has been largely in assisting in taking patients' histories and performing certain technical procedures.^{4,5}

A health appraisal center was instituted in September 1967 at the Straub Clinic, a private multispecialty fee-for-service group practice, located in Honolulu, Hawaii. The procedures followed in this unit include the following:

1. Self-administered medical history.
2. Diagnostic tests of vision, hearing, respiratory function, and Achilles' reflex time; electrocardiogram, blood pressure, chest x-ray, and urinalysis.
3. Screening physical examination.
4. Automated laboratory tests, including studies of blood chemistry and blood cells counts.
5. Follow-up of persons with questionable or abnormal findings or both.

The director of health appraisal center believed that nurses with additional inservice training could be taught to perform screening physical examinations without loss of quality. Thus, in June 1968, four nurses employed at the health appraisal center were selected to participate in the inservice training program for approximately 3 months. Their training consisted of on-the-job supervised physical examinations and attending sessions with students at the University of Hawaii School of Medicine.

Following this training period, these nurses were assigned to perform the screening physical examination, review patients' histories and results of their laboratory tests, and make tentative recommendations for decision by physicians. The purpose of this study was to analyze and compare the quality of the physical examinations performed by nurses with those performed by physicians.

Summary

A comparative study of four registered nurses' and seven physicians' observations in the health appraisal of apparently well persons was undertaken by reviewing and evaluating 1,000 patients' records. The objective was to see how well nurses who received 3 months of additional service in training could perform physical examinations and make diagnoses. The physicians' examinations were the criteria for determining the accuracy of the nurses' findings.

In 10.3% of the 16,000 independent variables, there was positive concurrence of findings by the physician and the nurse. Both the physician and nurse concurred that there was no finding in 70.3% of the variables. In 5% of the variables, the physician found a sign or symptom that the nurse did not. In 14.4% of the variables, the nurse found signs by the physician did not. Nurses had a tendency to record findings more completely than physicians. These notations generally pertained to observations of skin pigmentation and scars as well as auscultation of functional heart and breath sounds.

In view of the results of this study, there were few serious differences in recorded findings when the nurses and the physicians examined the same patients. For further validation of this observation, more fully controlled studies will be necessary.

References

1. Silver HK, Ford LC, Day LR. The pediatric nurse-practitioner: expanding the role of the nurse to provide increased health care for children. *JAMA*. 1968;204:298-302.
2. Patterson PK, Bergman AB. Time-motion study of six pediatric office assistants. *New Eng J Med*. 1969; 281:771-774.
3. Kaku K. Utilization of personnel time at child health conferences. Thesis. University of Hawaii School of Public Health 1968.
4. Coye R D, Hansen MF. The doctor's assistant. *JAMA*. 1969; 209: 529-533.
5. Lewis CE, Resnik BA, Schmidt G, Waxman D. Activities, events and outcomes in ambulatory patient care. *New Eng J Med*. 1969; 280:645-649.

Nurse-managed clinics. Other examples of health services research are the 12 nurse-managed doctor-supervised chronic disease clinics started at Straub Clinic in 1971 to 1973 with the aid of a federal grant. As noted in the following paper, they "would seem to be unnatural in a fee-for-service setting." Despite this, they flourished for a decade. Some remain but most gradually died. However, the principle is solid and the growth of capitation and managed care could see a flowering of such clinics. Dr Melvin Levin's Gout Clinic was one of these.

Share-Care Clinics

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Introduction

In the years 1971 to 1973, we received a grant for a project entitled, *Use of Allied Health Personnel in Management of Chronic Diseases*. The project's specific aim was to establish and evaluate non-physician-managed clinics for the long-term care of patients with chronic diseases as encountered in a fee-for-service, multispecialty group practice. Twelve of these